

CHAPTER ONE

SUMMARY

Introduction

Chapter One is a summary of this Draft Environmental Impact Statement (DEIS) on proposed changes to height and density limits in some Downtown zones. The chapter briefly describes background, features of the four alternatives (including a No Action Alternative), anticipated impacts, major issues to be resolved and mitigation strategies. At this stage, a preferred alternative has not been identified. A chart included in this chapter is a comparative overview of impacts identified for each alternative. For a more detailed discussion, please see Chapters 2 and 3 and the accompanying technical appendices.

Background

The City engaged in an extensive neighborhood planning process following the adoption of Seattle's Comprehensive Plan in 1994. As part of this process, neighborhood plans were developed for five subareas of the Downtown Urban Center. Some of these plans included proposals for changes to height and density limits in some Downtown areas. As part of ongoing planning, the City has studied and made decisions on a number of individual proposals:

With the City Council's initial approval of Downtown neighborhood plans in early 1999, proposals for rezones in the Commercial Core and Pioneer Square neighborhoods were implemented, along with limited amendments to bonus and TDR provisions.

In collaboration with King County and the Denny Triangle, the Transfer of Development Credits (TDC) program was adopted in late 1999, which allowed for a 30% height increase for residential and mixed-use development in zones within the Denny Triangle to preserve rural lands and generate resources for public amenities in the neighborhood. An area of approximately four acres was also upzoned from DMC 240 to DOC 2 300' to increase employment capacity in the neighborhood.

More recently, the City amended the provisions of the Downtown bonus and TDR programs through legislation adopted in mid-2001. Conditional height increases ranging from 10% to 30% were also adopted under this legislation for DOC 1, DOC 2 and portions of DRC zones. The bonus and TDR programs specify how projects can gain approval for greater density by providing for affordable housing, public open space, landmark preservation, human services and other public amenities.

This EIS studies another discrete set of actions that could be taken to implement changes recommended by Downtown neighborhood plans. It analyzes changes to height and density limits in three Downtown zones (see Study Area Map, Figure 1). The alternatives represent a range of possible actions that would increase zoning capacity within these areas to accommodate additional employment and residential growth. Alternative 1 represents the "high end" of possible changes, while Alternatives 2 and 3 emphasize changes supporting the commercial core and residential uses, respectively. A preferred alternative has not been identified. It is likely that City decisionmakers will combine actions from different alternatives as a result of public input and the findings of the EIS.

The purpose of this EIS is to disclose impacts associated with actions proposed under each alternative. This analysis makes it possible to compare outcomes of these different actions. It assists in identifying major issues that should be addressed in the course of developing a final proposal for implementation. Public review of this document and discussion of these issues will provide additional input about desired outcomes and the best approach for achieving them. This review will also help focus on key concerns that

may require further attention, either with additional work for the Final Environmental Impact Statement or as part of developing mitigation strategies to accompany a final proposal.

Features of the Alternatives

SUMMARY OF THE ALTERNATIVES

Alternative 1. Alternative 1 is a composite of proposals included in different Downtown neighborhood plans and recommendations by the advisory committee that participated in revising the Downtown bonus and TDR programs. This alternative calls for the greatest increases to both base and maximum density limits and height limits for all DOC 1, DOC 2 and DMC zones within the study area.

Alternative 2. This alternative limits height and density increases to the DOC 1 and DOC 2 zones and maintains existing limits in the DMC zones within the study area. There would be no changes to base density limits, and use of housing bonuses or housing TDR would be required to gain all floor area above base density (FAR) limits.

Alternative 3. Alternative 3 would further limit height and density increases to DOC 1 and a portion of DOC 2. To increase capacity for housing, mixed-use provisions would apply to DMC zones, and some DMC areas would be rezoned to DMR/C, a more residential-oriented zone.

Alternative 4. Alternative 4 is a No Action Alternative reflecting current zoning conditions, including the previously-adopted amendments that helped implement neighborhood plans.

ASSUMED AMOUNT OF GROWTH

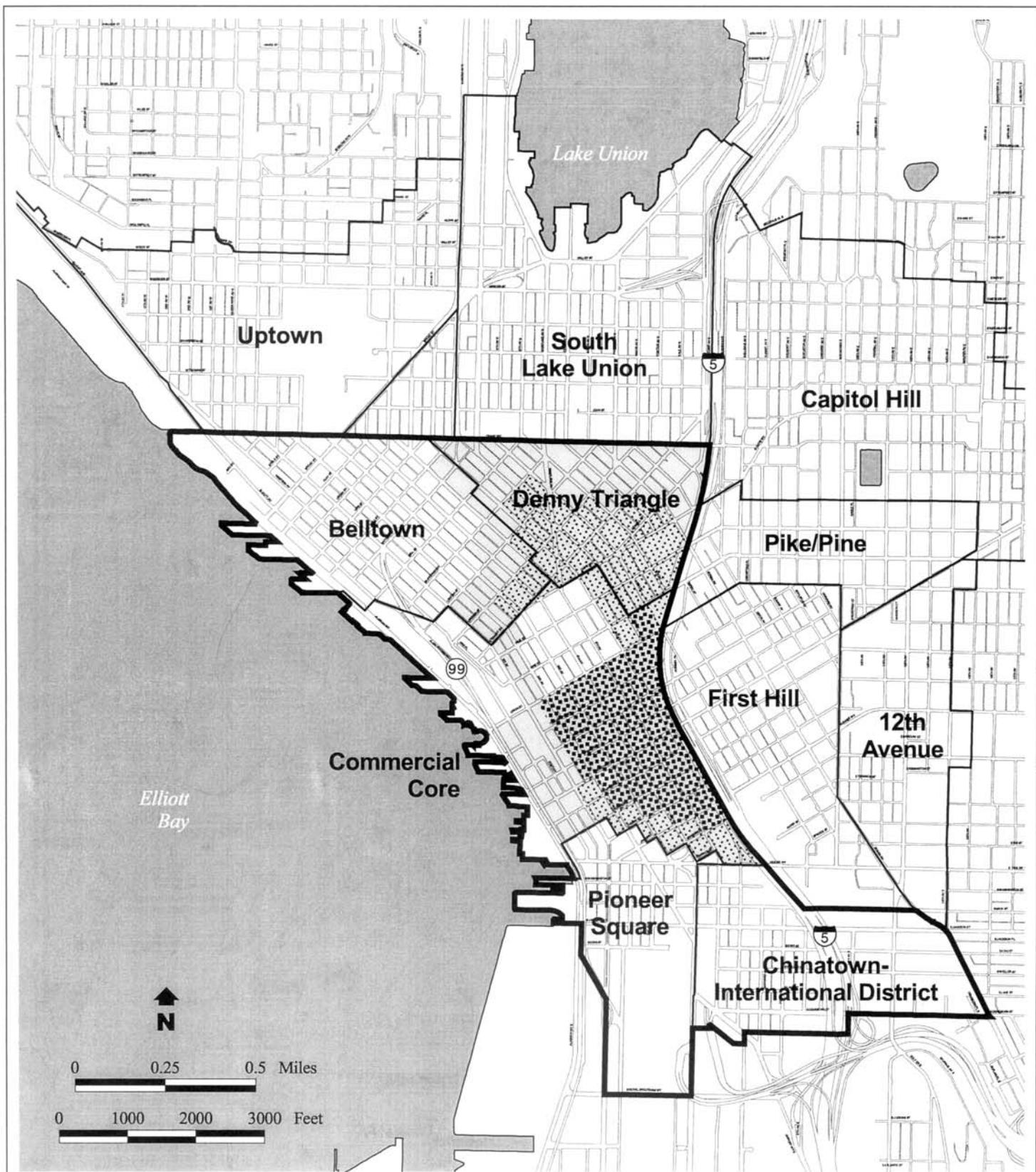
Different proposals for height and density increases vary the capacity of commercial and residential growth that can ultimately be accommodated within Downtown under each alternative. However, the projected demand for housing and commercial floor area Downtown over the 20-year period between 2000 and 2020 is assumed to be constant, regardless of overall zoning capacity. Because developers build for perceived demand rather than building the maximum that zoning will allow, the zoning changes will not significantly alter Downtown's growth over twenty years. Therefore, for all alternatives, the assumption is that from 2000 to 2020, the Downtown Urban Center will add 70,000 jobs and housing to accommodate 17,500 households (equivalent to 18,400 units).

Employment growth. The majority of the employment growth—90% (63,000 jobs)—is assumed to occur within the study area where height and density increases are being considered, with the remaining 10% (7,000 jobs) occurring in Pioneer Square, the International District, the retail core and Belltown.

Residential growth. Of the 18,400 units added Downtown, approximately 7,350 units (40%) would be accommodated in development within the study area, with the remaining 11,050 units occurring in other areas, including Belltown, Pioneer Square and the International District. It is estimated that accommodating 11,050 units outside the study area would require utilizing about 87% of the remaining development capacity in these areas. Depending on the alternative, between 69% (Alternative 3) and 87% (Alternative 4) of the total available development capacity would be needed to accommodate the additional 7,350 units forecasted for the study area.

ASSUMED PATTERN OF GROWTH

Infill and growth outward from the core. The analysis assumes future development will seek to infill remaining sites in the Downtown Office Core (DOC 1 and DOC 2) zones, and also grow outward from the office/retail core. Thus, redevelopable properties in or near the existing core are likely to be the most attractive for the next round of development.



DOWNTOWN EIS STUDY AREA

FIGURE 1

— Downtown Urban Center Boundary
— Urban Center/Urban Village Boundaries

EIS STUDY AREA:



DOC1 Zone



DOC2 Zone



DMC Zone

Strategic Planning Office
City of Seattle
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Larger sites and sites already assembled are more attractive. The “grow from the core” assumption is tempered by an assumption that larger sites under single ownership will be as likely to develop as sites in better locations that are challenged by small site sizes or multiple owners.

Similarities among alternatives in the pattern of growth. Under all of the alternatives, most of the growth projected for the 20-year period can be accommodated on the same sites, resulting in only limited distinctions between alternatives in the geographic distribution of growth. However, more distinctive growth patterns would likely emerge as additional growth occurs in later years, due primarily to changes in the DMC zones affecting available capacity for housing.

Relationship to Plans and Policies. All of the alternatives provide sufficient capacity to accommodate housing and job growth targets established for the Downtown Urban Center in Seattle's Comprehensive Plan.

The various Downtown Neighborhood Plans and the Downtown Urban Center Plan include a wide range of goals and policies about how Downtown should grow and the desired type of urban environment. Of particular relevance to this EIS analysis are housing affordability goals and policies with regard to lower-income households. Other relevant goals and policies seek to maintain the positive characteristics of existing development conditions, promote high-quality livable residential environments, and maintain desired physical relationships between Downtown areas and adjacent neighborhoods. Impacts related to these goals and policies are discussed in more detail below.

Major Conclusions

Development over 20 years under existing zoning, as reflected in Alternative 4, will result in substantial changes to some Downtown areas, particularly the Denny Triangle. For some studied topics, Alternatives 1, 2 and 3 would result in only subtle differences in impacts from the 20-year “baseline condition.” But for quite a few topics, future development under these alternatives would likely generate distinctly different levels of impacts. This section discusses several overall conclusions. Table 1 later in this chapter compares the impacts of the alternatives.

Population and Employment

Depending on the source of the projection, Downtown Seattle is expected to grow by 16,000-26,000 new residents and 50,000-70,000 new employees. This level of population and employment growth can be accommodated through development permitted by the zoning under all alternatives.

Housing

All of the alternatives provide enough capacity for new residential units to meet demand between 2000 and 2020. However, after 2020 the capacity for residential development will be limited.

The Denny Triangle Transfer of Development Credits (TDC) program would be eliminated under Alternative 1. This program encourages residential development in the Denny Triangle, provides funds for amenities in the Denny Triangle and preserves land from development in rural King County. Its use would be restricted under Alternatives 2 and 3. By retaining existing zoning under Alternative 4 (No Action), the TDC program would continue to be available throughout the Denny Triangle.

Funding for low-income housing would increase under Alternatives 1, 2 and 3, above that projected with existing zoning. Alternative 2, followed by Alternative 3, would provide the most funds for low-income housing development.

Six existing residential buildings containing 300 units are identified as sites where redevelopment could occur in the future. Three of the six buildings, with 141 dwelling units, receive subsidies to

keep their units affordable to households earning less than 50% of the median area income. Under all alternatives, more subsidized units would be built through housing bonus funds than might be demolished.

Land Use

There will be little difference among the alternatives in the mix of land uses in the study area. Under all alternatives, the mix of uses in the Denny Triangle would significantly change with the redevelopment of many of the neighborhood's vacant and underutilized blocks. Alternative 1 would result in fewer but larger office and residential buildings mixed in a high-density environment, whereas Alternative 4 (existing zoning) would likely result in more sites developed with slightly smaller buildings. Alternative 3 would provide the most difference from the other alternatives, with the projected development of residential enclaves in Belltown and the Denny Triangle.

As redevelopment occurs, less expensive office space is likely to be lost, and those human service providers that do not own their own space may find it more difficult in the future to find affordable space in Downtown Seattle.

One City of Seattle landmark and a number of buildings considered important to various Downtown neighborhoods were identified as sites where redevelopment might occur, due to the small size of the landmark compared to the potential maximum development permitted on the site.

Height, Bulk and Scale

Among the alternatives, Alternative 1 allows the greatest increases in height and density throughout the study area. With these increases, projected growth could be accommodated in fewer but larger projects than the other alternatives. Taller, bulkier structures would be permitted in some sensitive transition areas, resulting in a more abrupt change in scale and intensity of development along edges where the study area abuts other neighborhoods.

Under all the alternatives, the absence of a density limit on residential use, along with exemptions for above-grade residential parking from floor area limits, creates the potential for very bulky residential and mixed-use developments.

The likely scale and character of residential development, and the general mixing of housing with high-density commercial projects, could hinder development of areas with a strong residential character, except in Alternative 3 where additional residential zones are established in part of the Denny Triangle and the southern edge of Belltown.

In some zones where the bulky appearance of recent development is attributed to current height limits, the proposed density increases are proportionally greater than proposed height increases. Consequently, the outcome could be taller buildings with similar bulky characteristics rather than more slender, taller towers.

The narrower street widths and longer block sizes in portions of the Denny Triangle could exacerbate impacts associated with bulkier development.

Pedestrian Amenities and Streetscape

Only minimal development standards for enhancing the pedestrian environment apply in the portion of the Denny Triangle west of Westlake Avenue. This could result in a low level of pedestrian amenity and limited street level activity in what is likely to emerge as a high-density office district.

Parks and Open Space

Future development under any of the alternatives will increase Downtown employment and residential populations, creating more demand for the use of existing open space resources. Some of this demand

will be met through open space provided as a result of zoning requirements and incentives, as well as common development practices. Development will provide required open space to meet the needs of building occupants, as well as public open space to help augment existing public resources.

The greatest increase in employment and residential population is projected for the Denny Triangle, where open space resources are currently limited. Under any alternative, open spaces are unlikely to increase sufficiently to meet all of the open space goals in the Comprehensive Plan.

Elimination of the Transfer of Development Credits program due to height increases, or reduction of the program's area, represents a potential loss of a funding source for desired open space improvements in the Denny Triangle.

Views and Aesthetics

Potential impacts on views were considered for public viewpoints, view-protected landmarks, scenic routes, the skyline and other non-protected views. In many cases, differences between the alternatives in visual impacts would be relatively subtle. However, Alternatives 2, 3 and 4 would promote differences in allowable building bulk that would be detectable when viewed from some locations.

Urban Climate (Shadows and Wind)

Future development of taller buildings in the Denny Triangle, edge of Belltown and 1st Avenue/Western Avenue vicinities would add to the shading of city streets. The possibility of higher building heights on a few properties near Denny Way creates slightly greater potential for shading impacts on Denny Park.

Future development of new buildings in Downtown would create the potential for additional wind effects near street level, depending upon the design of specific buildings and the general grouping of buildings.

Transportation

For all alternatives, traffic volumes in 2020 entering and leaving Downtown at the studied locations would increase by approximately 10% in the AM Peak hour and 20% in the PM peak hour compared to existing conditions. This reflects the relatively high level of growth over 20 years studied by this EIS.

In the northeast corner of Downtown (Denny Triangle), Alternative 1 would generate traffic approaching the rated capacity of key commuting corridors near the Stewart Street and Denny Way intersection by the year 2020. For the other alternatives, traffic volume/capacity conditions in this vicinity would be approximately 5-10% better than Alternative 1.

Impacts of the alternatives in other portions of Downtown would not be as substantial as in the Denny Triangle.

By 2020, even with no zoning changes, the number of intersections experiencing significant or severe congestion in the key studied corridors (e.g., Stewart, Howell, Olive Way, Denny Way) would increase from 5 intersections today to approximately 17 intersections in the PM peak hour. Alternatives 1, 2 and 3 would cause 2 to 5 additional intersections to experience this level of congestion (level of service E or F) in the PM peak hour. This would adversely affect travel times through the studied corridors for general traffic and buses, and cause some queuing (lane backup) issues in several locations.

Future development over time could contribute to displacement of several existing King County Metro bus layover locations, primarily in the Denny Triangle.

Parking

With future development under any of the alternatives, at least 17,000 additional off-street parking spaces would be provided, and approximately 7,100-7,500 existing off-street parking spaces would be displaced, largely in the Denny Triangle and edge of Belltown vicinities.

Future growth would increase overall parking demand, for approximately 19,500 to 23,750 spaces, depending upon how many commuters choose to use transit rather than automobiles. Depending upon the strength of demand, it is possible that developers or private parking providers would provide a greater supply of parking.

Competition for on-street parking spaces would likely increase, especially in areas of concentrated future development.

Energy

The EIS growth assumptions are approximately consistent with levels of growth in City Light projections. City Light predicts that a new substation serving Downtown needs to be energized by 2012. Under Alternative 1, potential future development resulting from higher zoning height/density limits in the Denny Triangle area east of 8th Avenue could result in capacity limitations more quickly than would otherwise occur, due to increased commercial loads. These limitations and needed improvements will be closely monitored and addressed in City Light's Capacity Plan in 2004. Alternatives 3 and 4 would generate comparatively lesser impacts on the electrical system than Alternatives 1 and 2.

Water and Sewer/Stormwater Utilities

The alternatives would generate additional water consumption and sanitary sewage volumes due to future development of commercial and residential uses. However, the capacity of existing systems in general would be adequate to provide for this future growth.

Better stormwater control requirements with future development will likely improve overall stormwater flow conditions in the combined sewer facilities.

Major Issues to be Resolved

Some questions relating to the magnitude of impacts or the design of mitigation strategies are still unresolved. These issues will be addressed in ongoing review and planning, and in the Final EIS. Major issues requiring further study and resolution include the following:

Balance between employment and housing growth Downtown

The proposed changes studied in the EIS raise an important policy question about Downtown growth that needs to be addressed to guide the City's decisions. Should actions be taken to expand areas Downtown dedicated primarily for concentrated employment growth, with the potential risk of foreclosing opportunities for more housing development in these areas? Or should actions to increase Downtown's capacity for employment growth be balanced with actions to create additional capacity for residential growth?

Below are two potential policy choices related to the nature of Downtown growth:

Expand Downtown's role as employment center. Changes to height and density limits in the study area will expand Downtown's ability to accommodate more jobs by increasing employment capacity. Higher commercial densities beyond the core will provide opportunities for more concentrated employment growth in areas currently intended for a mix of both housing and moderate-density employment activity. As more of the Downtown area absorbs employment growth, housing will be

accommodated in peripheral areas, like Belltown, or in areas adjacent to Downtown where land is available.

As growth continues under the proposed changes, residential capacity will be "built-out" while capacity remains for continued employment growth. Consequently, the amount of housing that can continue to be provided Downtown for Downtown employees will diminish. Housing for Downtown employees will increasingly need to be provided in areas outside of Downtown. With constraints on housing capacity in adjacent areas, including First Hill, Capitol Hill, South Lake Union, and Uptown Queen Anne, opportunities for housing future Downtown employees in these areas will be limited as well.

Promote a balance between both employment and housing growth. This approach first requires defining the appropriate balance between the amount of jobs and housing to be accommodated Downtown over the long term, beyond the 2014 timeframe of the Comprehensive Plan growth targets. As the Comprehensive Plan is updated in 2004 to cover the timeframe between 2014 and 2024, housing and employment growth targets may be updated to cover those additional ten years. Measures then need to be considered for ensuring sufficient capacity to maintain this balance—either by reserving more areas for housing, linking increased employment density to provisions for additional housing production, or some other means.

Livability of Downtown residential environments

Assumptions about the type and location of housing to be built in the study area in the future imply that a certain type of residential environment will emerge, with larger, denser residential projects mixed with high-density commercial development. These assumptions raise questions about the type of residential environments desired to accommodate future housing, as well as the measures needed to achieve these environments. Included among these questions: how best to accommodate a desired mix of incomes and provide necessary amenities and services needed to support different residential populations? With higher land costs in areas where commercial densities are increased, will subsidized affordable housing continue to be built in these areas? If so, will there be sufficient support services available to this population?

Two options for future Downtown residential environments that are explored in the EIS include:

General mixing of housing development with commercial development;

Creation of residential areas or "enclaves" where housing is the predominant use.

Continuation of the Transfer of Development Credit Program

The City established the TDC program in the Denny Triangle jointly with King County in 1999. While no projects have yet purchased development credits, at least a half-dozen have expressed interest, and the County has already committed limited resources to be used in the design and implementation of a demonstration Green Street block.

In varying degrees, the proposed alternatives reduce the area of the Denny Triangle where the TDC program would continue to operate. Alternative 1, with proposals for the greatest height and density increases in the Denny Triangle, would likely result in the elimination of the program altogether. Alternative 2 would keep the program active in roughly half of the area, while Alternative 3 would maintain the program in about 2/3 of the area.

The TDC program provides a means to target public and private resources into a high-growth area. It is also seen as a way to make residential development a more competitive option for developers in zones that allow relatively high densities for commercial development. Because residential use is not subject to a density limit under Downtown zoning, the TDC program provides the only mechanism for requiring market-rate residential development to contribute to public amenities in exchange for allowing additional residential floor area above current height limits.

Accommodating transition between high-density Downtown commercial areas and less intensive adjacent neighborhoods

Downtown zones were originally established and mapped to accommodate a gradual transition in the density, height and scale of development in areas separating the "core" commercial zones and adjacent residential and mixed-use areas. Increases in height and density would create a more abrupt change in the scale and intensity of development along the "edges" of these transition areas.

Under what circumstances should measures be applied to maintain a development transition? This is especially an issue for portions of DMC areas abutting Belltown, the Cascade neighborhood and the waterfront; as well as portions of the DOC 2 zone abutting the historic districts of Pioneer Square and the International District to the south, Pike/Pine to the east, and the residential enclave desired in the northeast corner of the Denny Triangle.

Accommodating additional open space

With only limited open space, the affected area currently has the greatest employment density in the region (over 300 jobs per acre), which is projected to increase further in 20 years to over 460 jobs per acre. Furthermore, projections call for adding a substantial amount of housing to the area—over 7,350 new units. With about 6,000 units currently in the affected area, the amount of housing will more than double, increasing density to about 32 units per acre. With only a limited increase in the amount of open space planned for the area, this additional growth is likely to raise concerns about being adequately served.

Promoting a desired development scale

Preliminary studies have identified several issues related to the bulk of development under any of the EIS alternatives, including:

Residential and mixed-use development. Current conditions create the potential for very bulky residential and mixed-use development due to the fact that FAR density limits do not apply to residential uses and accessory parking provided in above-grade structures. In the absence of such limits, current bulk controls have only a limited impact on overall building bulk. With increased height limits, the issue of development bulk is likely to gain more attention as more residential and mixed-use developments occur in Downtown commercial zones, and projects increasingly push the building envelope to maximize development potential. However, addressing this issue raises another dilemma. Measures to promote more desirable building forms (slender towers, tower spacing, etc.) will reduce the number of units that can be accommodated on a site—appearing to contradict efforts to promote more housing.

Commercial development. Increasing density limits, even when coupled with height increases, could result in the unintended consequence of producing bulkier buildings. For example, the Alternative 1 proposal to raise density limits from 10 FAR to 14 FAR (40% increase) in DOC 2 areas of the Denny Triangle, while increasing height limits from 300 feet to 400 feet (33% increase), will create a similar situation to that of the DOC 1 zone, where problems have been cited with the bulkiness of development built to the current maximum 14 FAR and 450-foot height limit. Given the larger site sizes and lower height limit of the DOC 2 zone, this condition would likely be repeated here. Similarly, the proposed 10 FAR in DMC zones with height limits of 240 feet or less could raise the same issues cited in DOC 2 zones under the current 10 FAR limit and 300-foot height limit.

Table 1
Summary of Impacts

Alternative 1 High End Height and Density POPULATION AND EMPLOYMENT Impacts	Alternative 2 Concentrated Office Core	Alternative 3 Residential Emphasis	Alternative 4 No Action Alternative
<p>Employment Growth: Commercial capacity could accommodate as much as 48 years worth of employment growth, resulting in as many as 338,000 employees in Downtown Seattle.</p> <p>In 20 years, there could be an increase of between 50,000 and 71,000 new Downtown employees.</p> <p>Population Growth: Residential capacity could accommodate as much as 26 years of demand for Downtown housing.</p> <p>In 20 years there could be an additional 21,900 new Downtown Seattle residents in 17,500 new Downtown households.</p>	<p>Commercial capacity could accommodate as much as 42 years worth of employment growth, resulting in as many as 319,000 employees in Downtown Seattle.</p> <p>Same as Alternative 1</p> <p>Population Growth: Residential capacity could accommodate as much as 27 years of demand for Downtown housing.</p> <p>Same as Alternative 1.</p>	<p>Commercial capacity could accommodate as much as 38 years worth of employment growth, resulting in up to 305,000 Downtown Seattle employees.</p> <p>Same as Alternative 1</p> <p>Population Growth: Residential capacity could accommodate as much as 30 years of demand for Downtown housing.</p> <p>Same as Alternative 1</p>	<p>Commercial capacity could accommodate as much as 37 years worth of employment growth, resulting in up to 300,000 employees in Downtown Seattle.</p> <p>Same as Alternative 1</p> <p>Population Growth: Residential capacity could accommodate as much as 29 years of demand for Downtown housing.</p> <p>Same as Alternative 1</p>
<p>HOUSING Impacts</p> <p>Capacity for Housing: There could be capacity for as many as 22,855 new units in Downtown Seattle.</p> <p>TDC Program: The Denny Triangle TDC program would</p>	<p>Approximately 13% of new households could earn less than 80% of the median income in King County.</p> <p>Capacity for Housing: There could be capacity for as many as 24,800 new units in Downtown Seattle.</p> <p>TDC Program: The Denny Triangle TDC program would</p>	<p>Approximately 17% of new households could earn less than 80% of the median income in King County.</p> <p>Capacity for Housing: There could be capacity for up to 27,440 new units in Downtown Seattle.</p>	<p>Approximately 11% of new households could earn less than 80% of the median income in King County.</p> <p>Capacity for Housing: There could be capacity for as much as 26,410 new units in Downtown Seattle.</p> <p>TDC Program: The Denny Triangle TDC program would</p>

Alternative 1 High End Height and Density	Alternative 2 Concentrated Office Core	Alternative 3 Residential Emphasis	Alternative 4 No Action Alternative
(TDC) program would no longer be viable under this Alternative.	only be active in the DMC zones. It would create additional capacity for as many as 2,630 new units. Housing Types: Market-rate housing is most likely to be built in towers as part of mixed-use projects. Subsidized units are more likely going to be built in lower-scale residential structures.	be active in the DMC zones and portions of the DOC2 zone. It would create additional capacity for as many as 4,400 new units. Same as Alternative 1	be active in all Denny Triangle neighborhoods. It would create additional capacity for as many as 5,300 new units. Same as Alternative 1
		<p>Housing Bonus Program: The Housing bonus program might leverage sufficient funds to build up to 2,775 units affordable to households earning less than 80% of MAI over twenty years.</p> <p>Demolition of Existing Residential Buildings: Up to six residential buildings with 300 residential units are on sites that could be redeveloped. Three of the six buildings, with 14:1 dwelling units, receive subsidies to keep their units affordable to households earning less than 50% MAI.</p> <p>LAND USE Impacts</p>	<p>Housing Bonus Program: The Housing bonus program might leverage sufficient funds to build up to 2,025 units affordable to households earning less than 80% of MAI over twenty years.</p> <p>Development Capacity: There would be capacity for over 30 million square feet of new commercial space and as many as 14,600 new units within the study area.</p> <p>Development Capacity: There would be capacity for over 38 million square feet of new commercial space and 10,500 new units within the study area.</p> <p>Development Capacity: There would be capacity for over 33 million square feet of new commercial space and as many as 11,900 new units within the study area.</p> <p>Development Capacity: There would be capacity for over 28 million square feet of new commercial space and 13,750 new units within the study area.</p>

Alternative 1 High End Height and Density	Alternative 2 Concentrated Office Core	Alternative 3 Residential Emphasis	Alternative 4 No Action Alternative
Up to 244 Downtown parcels containing 72 acres have been identified as potential sites for redevelopment.	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1.
Over twenty years, approximately 17.5 million square feet of commercial space would be built in the study area. Almost 45% of the commercial space might be built within the Denny Triangle DOC2 zone, with another 25% built in the Commercial Core DOC1 zone.	Similar to Alternative 1.	Similar to Alternative 1.	Similar to Alternative 1.
Over twenty years, approximately 7,400 units would be built within the study area. Approximately 60% of those units might be built in mixed-use projects in the Denny Triangle DOC2 zone.	Similar to Alternative 1.	Similar to Alternative 1.	Similar to Alternative 1.
One City of Seattle Landmark and one site on the National Register have been identified as potential development sites.	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1.
HEIGHT, BULK AND SCALE Impacts	Height: New buildings by height range: Approx. 36 structures greater than 250 feet (65% of new structures). Bulk/Density: Predicted to result in 39 devs with 55 structures by 2020.	Approx. 31 structures greater than 250 feet (55% of new structures). Nearly the same as Alt. 1—40 devs with 56 structures.	Approx. 28 structures greater than 250 feet (47% of new structures). Bulk would be spread across more projects: 44 devs and 60 structures.
Additional bulk from exempted residential uses and a few “other” uses would contribute to actual		Similar to Alt. 1, but fewer devs would achieve the higher end of densities.	Fewer devs than Alt. 1 or 2 would reach higher densities, due to lower height limits and

Alternative 1 High End Height and Density	Alternative 2 Concentrated Office Core	Alternative 3 Residential Emphasis	Alternative 4 No Action Alternative
building bulk legally exceeding maximum density limits. Bulk Massing Patterns: Greatest massing of bulk would occur in the Denny Triangle. Rectangular shape of blocks would contribute to perceived bulkiness of development in the Denny Triangle.	Similar to Alt. 1, but lower scale of development at periphery.	more bulk controls. Retention of existing height and density at east and west edges of Denny Triangle DOC 2 zone would provide some “stepping down” in massing of bulk.	Similar to Alt. 1, but less-bulky development spread over more sites in Denny Triangle.
New development in peripheral areas would be more dispersed, except for potential concentration at edge of Belltown. Bulk—Height/density relationships: Alt. 1 changes may not resolve an existing zoning issue (relating to allowable height and bulk) that results in bulkier building designs.	Similar to Alt. 1, but lower scale of development at periphery. Similar to Alt. 1.	Similar to existing zoning, but more bulk controls in some areas may result in residential towers that are more slender. Similar to Alt. 1.	Similar to Alt. 3 but no additional bulk controls would allow some bulkier new development. The existing zoning issue would remain.
It may be difficult to fit all of the maximum commercial density within proposed DMC height limits between 165 and 225 feet (near Denny Way, and 1 st Ave/Western Ave vicinity). Scale—Transitions: Greatest differences among the alternatives in zoning height/density with adjacent areas (Pike/Pine, Denny Way, Belltown, Pioneer Square/Int. District, harborfront, retail core).	Without these changes, this impact would not occur. Scale—Compatibility with existing development: Intensity of new development in Denny Triangle would generate greatest differences in compatibility with existing	Without these changes, this impact would not occur. Fewer changes in transitions than Alt. 1, due to no changes in zoning near Belltown, Denny Way, or 1 st Ave/Western Ave vicinity.	Not applicable. Transitions provided by the existing zoning pattern would be maintained. Lower commercial density limit and additional bulk limits for towers would make transitions more gradual in the Denny Way, Belltown and 1 st Ave./Western Avenue vicinities.
		Less impact than Alt. 1 in the peripheral DMC zones. Similar impacts to Alt. 1 in Commercial Core.	Similar to Alt. 1, except for DMC zones where no zoning changes would occur. Alt. 3 changes would promote greater compatibility in residential-oriented zones. Similar to Alt. 1 for the DOC office core zones.

Alternative 1 High End Height and Density	Alternative 2 Concentrated Office Core	Alternative 3 Residential Emphasis	Alternative 4 No Action Alternative	
<p>Scale—Effect on development diversity: The amount of redevelopment in Denny Triangle could potentially result in a more homogeneous character.</p> <p>Scale—Effect on residential character: Overall additional bulk of development and mixing of residential and non-residential projects could discourage achievement of a beneficial residential character.</p> <p>PEDESTRIAN AMENITIES & STREETSCAPE Impacts</p> <p>Positive Impacts:</p> <p>Narrow sidewalks would be widened. Additional street trees would be provided. Green Street improvements would be provided. Continuous street level uses would be promoted along several streets, aided by infill development over time. New public open spaces in developments should benefit pedestrians.</p> <p>Adverse Impacts:</p> <p>Above-grade parking could detract from street-level character. In some areas, non-requirement of street level uses could limit street level activity in buildings. There would be a greater sense of</p>	<p>Similar to Alt. 1.</p> <p>Similar to Alt. 1.</p> <p>Residential-oriented zoning in some areas creates some greater potential for achieving beneficial residential character.</p>	<p>Similar to Alt. 1, but broader potential range of scale in new structures.</p> <p>Similar to Alt. 1.</p>	<p>Similar to Alt. 1, but the broadest potential range of scale in new structures.</p> <p>Similar to Alt. 1.</p> <p>Positive Impacts:</p> <p>Similar to Alt. 1, except greater chance for positive street environment in the residential-zoned areas, due to lower bulk limits. Lack of zone changes in some DOC 2 areas would avoid some streetscape effects related to greater building bulk.</p> <p>Positive Impacts:</p> <p>Similar to Alt. 1. Even in areas with retained zoning (in DMC zones), the streetscape conditions as perceived by pedestrians would not be much different than would occur under Alt. 1.</p>	<p>Positive Impacts:</p> <p>Same amount of growth would be accommodated on more properties than under Alt. 1, providing more opportunities for streetscape improvements, including Green Streets.</p> <p>Positive Impacts:</p> <p>Similar types of impacts as under Alternative 1, but somewhat less potential for impacts, due to residential-oriented zoning changes in some areas, and lack of</p> <p>Adverse Impacts:</p> <p>Same amount of growth on more properties than under Alt. 1 would have additional risk of adverse impacts occurring along some streets, as listed</p>

Alternative 1 High End Height and Density	Alternative 2 Concentrated Office Core	Alternative 3 Residential Emphasis	Alternative 4 No Action Alternative
<p>“enclosure” within several streets.</p> <p>In some areas, possible loss of older structures may diminish variety and pedestrian orientation at street level.</p> <p>PARKS & OPEN SPACE Impacts</p> <p>Predicted on-site open space developed in future projects:</p> <p>1.7 acres</p> <p>Use of open space TDR:</p> <p>The potential supply of open space TDR is approx. 1-1.3 million sf. Demand not expected to exceed supply.</p> <p>Open space required for office uses: 7.9 acres</p> <p>Common rec. area open space required for residential uses: 7.2 acres</p> <p>Predicted Contributions to TDC Amenity Credit Fund:</p> <p>None, since Alt. 1 would likely terminate the use of the TDC program.</p> <p>Relationship to Open Space Goals - Denny Triangle</p> <p>Even with predicted open space in future developments, this area would fall a bit short of meeting the residential and employee-oriented open space goals. However, would likely meet the distribution goal.</p>	<p>these areas than under Alt. 1.</p> <p>change in some DOC 2 areas.</p> <p>1.9 acres</p> <p>Supply would remain the same. Changes in DOC zones would increase demand similar to Alt. 1.</p> <p>7.7 acres</p> <p>7.2 acres</p> <p>Est. \$1.2 million</p> <p>Similar to Alternative 1.</p>	<p>under Alt. 1.</p> <p>Supply would be less than under Alt. 1, but Alt. 4 would allow for the greatest use of open space TDR among the alternatives.</p> <p>7.8 acres</p> <p>6.5 acres</p> <p>Est. \$3.5 million</p> <p>Nearly the same as Alternative 1, except residential-zoned area could promote more residentially-oriented open space.</p>	<p>under Alt. 1.</p> <p>Supply would be less than under Alt. 1, but Alt. 4 would allow for the greatest use of open space TDR among the alternatives.</p> <p>2.9 acres</p> <p>7.8 acres</p> <p>6.5 acres</p> <p>Est. \$4.3 million</p> <p>Slightly more open space in Denny Triangle, possibly spread over more area than Alternative 1.</p>

Alternative 1 High End Height and Density	Alternative 2 Concentrated Office Core	Alternative 3 Residential Emphasis	Alternative 4 No Action Alternative
Open Space - Commercial Core Would meet or exceed the residential and employee-oriented open space goals, and would likely meet the distribution goals.	Similar to Alternative 1.	Similar to Alternative 1.	Similar to Alternative 1.
Number of future development sites adjacent to Green Streets: 10 sites	10 sites	11 sites	14 sites
VIEWS AND AESTHETICS Impacts			
Public Viewpoints	Same impacts as Alternative 1.	Same impacts as Alternatives 1 and 2.	No impacts. Slightly less potential for view impacts than Alternatives 1, 2 or 3 due to lower height limits in property.
Harborview Viewpoint: Possible future development at a site between Yesler Way and Jefferson St., 5 th and 6 th Avenues would block a view toward the south end of Elliott Bay from the Harborview Viewpoint.	Same impacts as Alternative 1.	Same impacts as Alternative 1.	Similar impacts to Alternative 2, but less potential for impairment due to omission of DOC 2 zone change east of 8 th Avenue. However, similar to Alternative 1 in potential for impairment of Space Needle and Olympic Mountains views.
Four Columns Park: With future development in the Denny Triangle, views from Four Columns Park toward the Space Needle, Olympic Mountains and Queen Anne (including the landmark Q.A. High School) would gradually be obscured. The additional increment of height/density would obscure additional sky area, but would not cause different types of visual impairment than are already possible under existing regulations.	Similar impacts to Alternative 1, but slightly less potential for impairment of more northerly views toward the vicinity near I-5 and Denny Way. Similar to Alternative 1 in potential for impairment of Space Needle and Olympic Mountains views.	Similar impacts to Alternative 1.	Similar impacts to Alternative 1 in potential for impairment of Space Needle and Olympic Mountains views.
Views Toward Landmarks	Less potential for impacts than Alternative 1 because Terminal Sales Building and 1 st Avenue	Slightly less potential for impacts than Alternatives 1 or 2, because of modest changes	No impacts. However, the potential for impacts on views to landmarks is roughly similar

Alternative 1 High End Height and Density	Alternative 2 Concentrated Office Core	Alternative 3 Residential Emphasis	Alternative 4 No Action Alternative
contribute to their diminished prominence in the urban setting. Examples include the Camlin Hotel, Rainier Club & Terminal Sales Bldg.	group of landmark buildings would not be subject to influence of zone changes.	near Terminal Sales Building and 1 st Avenue group, and lack of rezone adjacent to the Times Square Building.	under any alternative.
Skyline Views			
Kerry Park: Future development in the Denny Triangle vicinity would further obscure views toward Cascade foothills to the southeast (already partially blocked by existing development).	Slightly less potential for impacts than Alternative 1 due to omission of some zone changes.	Slightly less potential for impacts than Alternative 1 due to different set of zone changes that maintains transitions.	No impacts. Somewhat less potential for identified types of view impacts with future development.
Belvedere Viewpoint: Future development in the Denny Triangle would fill in a portion of the skyline and further obscure views toward Cascade Mountains in the background of views from the Belvedere (W. Seattle) viewpoint.	Slightly less potential for impacts, due to lesser bulk and height in the 1 st Avenue and Western Avenue vicinity.	Slightly less potential for impacts than Alternatives 1 and 2.	No impacts. Somewhat less potential for identified types of view impacts with future development.
Other skyline views: Changes in skyline views would be most apparent in views from the east, from Pike-Pine and Capitol Hill areas, and views from the north.	Somewhat less potential than Alternative 1 for skyline view impacts from the east and north due to omission of zone changes in the Denny Way vicinity.	Somewhat less potential than Alternatives 1 or 2 for skyline view impacts due to omission of zone changes in portion of Denny Triangle.	No impacts. However, existing opportunities for height increases would remain. Over time, future development will change the skyline in ways similar under any alternative.
Scenic Routes			
Changes in views from scenic routes would primarily involve changes in the skyline and greater presence of denser buildings in the middle ground and background. Routes most affected include: Westlake and Fairview Aves, I-5 southbound between Lakeview Blvd and Olive Way, Yesler Way, Dexter Avenue, and SR 99 southbound before Battery Street Tunnel.	Slightly less potential for impacts due to omission of zone changes in the Denny Way and 1 st Avenue and Western Avenue vicinities.	Slightly less potential for impacts due to different zone changes in the Denny Way and 1 st Avenue and Western Avenue vicinities.	No impacts. Over time, future development will add building bulk in ways generally similar under any alternative.

Alternative 1 High End Height and Density CLIMATE—SHADOWS AND WIND Impacts	Alternative 2 Concentrated Office Core	Alternative 3 Residential Emphasis	Alternative 4 No Action Alternative
<p>Shadows</p> <p>Taller buildings in all of Denny Triangle would add to shading of city streets.</p> <p>Taller buildings in 1st/Western Ave. vicinity and edge of Belltown would add to shading of city streets.</p> <p>Additional shading of Downtown SEPA-identified parks not likely to occur due to zoning changes.</p>	<p>No zone changes in peripheral areas of Denny Triangle would result in somewhat less potential for shading of city streets than Alternative 1.</p> <p>No zone changes in 1st Ave./ Western Ave. vicinity or edge of Belltown would avoid additional shading effects.</p> <p>Similar to Alternative 1.</p> <p>The possibility of higher building heights with future development near Denny Park at Denny Way creates slightly greater potential for shading impacts on the park.</p>	<p>Less intensive zoning in peripheral areas of Denny Triangle would result in less potential for shading of city streets than Alternatives 1 or 2.</p> <p>Less intensive zoning in edge of Belltown and 1st Avenue/ Western Ave. vicinities would result in less potential for shading of city streets than Alternatives 1 or 2.</p> <p>Similar to Alternative 1.</p> <p>No zone changes near Denny Way would avoid additional shading effects on Denny Park.</p>	<p>No changes, but future developments under existing height/density limits could add to total extent of shading of city streets.</p> <p>No changes, but future developments under existing height/density limits could add to shading of city streets.</p> <p>No changes relative to Downtown SEPA-identified parks, although future development closer to protected parks could possibly trigger the need to use SEPA protections.</p> <p>No changes</p> <p>Changes would not affect zoned height/density near Denny Way, thus avoiding additional shading effects on Denny Park.</p> <p>Nearly the same as Alternative 1.</p> <p>Future new buildings in the office core and some peripheral areas would create the potential for additional wind effects near street level. However, interspersing of new buildings with existing buildings may help protect them from some wind exposure.</p> <p>The additional bulk and distribution</p>

Alternative 1 High End Height and Density	Alternative 2 Concentrated Office Core	Alternative 3 Residential Emphasis	Alternative 4 No Action Alternative
<p>of future development in the Denny Triangle may provide some additional buffering of winds from the north. However, the new buildings at the northern periphery would be exposed to those winds and their effects.</p> <p>ENERGY Impacts</p> <p>City Light predicts that a new substation serving Downtown needs to be energized by 2012. Growth rates studied in the EIS are comparable to City Light load growth projections.</p> <p>Factors that could accelerate growth in electrical loads include:</p> <ul style="list-style-type: none"> --higher-than-forecasted economic activity; --greater-than-expected high-density loads (such as "server hotels") --higher "system redundancy" needs. <p>Potential future development arising from higher zoned height/density limits in the Denny Triangle area east of 8th Avenue could result in capacity limitations more quickly than would otherwise occur, due to increased commercial loads. These limitations and needed improvements will be closely monitored and addressed in City Light's Capacity Plan in 2004.</p>	<p>and bulk of future buildings in the Denny Triangle and peripheral areas, potential wind effects would be somewhat less than for Alternative 1.</p> <p>ENERGY Impacts</p> <p>Nearly the same as Alternative 1.</p> <p>Same as Alternative 1.</p> <p>Impacts approximately similar to Alternative 1, except slightly less-intensive zoning changes in portions of Denny Triangle east of 8th Avenue could reduce the worst case potential for electrical infrastructure impacts in that area.</p>	<p>wind effects than Alternatives 1 or 2.</p> <p>Nearly the same as Alternative 1.</p> <p>Same as Alternative 1.</p> <p>Impacts slightly less than Alternative 1 and 2. Alternative 3's greater residential emphasis in zoning of the portion of Denny Triangle east of 8th Avenue would reduce the magnitude of impacts on the electrical system compared to Alternatives 1 and 2.</p>	<p>effects than Alternatives 1, 2 or 3.</p> <p>Nearly the same as Alternative 1.</p> <p>Same as Alternative 1.</p> <p>Under Alternative 4 (existing zoning), impacts would be nearly the same as for Alternative 1. However, growth may spread over a few more properties in the Commercial Core, and overall commercial development capacity would approximately 25% less than Alternative 1 (and residential capacity 19% less).</p>

Alternative 1 High End Height and Density	Alternative 2 Concentrated Office Core	Alternative 3 Residential Emphasis	Alternative 4 No Action Alternative
<p>There is considerable potential for additional growth in both Downtown and South Lake Union. However, due to the presence of separate distribution systems for these two areas, they would not compete for the same substation transformer or distribution capacity.</p> <p>TRANSPORTATION Impacts</p> <p>Approximately 1.285 million person trips are projected to have an origin and/or destination in Downtown Seattle on an average weekday in year 2020, 58% greater than today's 815,000 person trips. This reflects the high-end growth forecast used in this EIS.</p> <p>For Alternative 1, volumes across all screenlines are projected to increase by 10.1% in the AM peak and 20.9% in the PM peak hour (year 2020).</p> <p>At Screenline 8 (NE Denny Triangle), eastbound PM peak traffic is projected to be approximately 8% greater than projected for the 2020 Baseline Condition (Alt. 4).</p> <p>At Screenline 8 (NE Denny Triangle), the predicted PM peak hour volume-to-capacity (v/c) ratio would reach 1.20 by 2020. A v/c ratio of 1.20 is the City's maximum arterial level of service standard.</p>	<p>Similar to Alternative 1.</p> <p>Same as Alternative 1.</p> <p>For Alternative 2, volumes across all screenlines are projected to increase by 9.3% in the AM peak and 19.7% in the PM peak hour.</p> <p>At Screenline 8, eastbound PM peak hour traffic is projected to be approximately 1.3% greater than the 2020 Baseline Condition (Alt. 4).</p> <p>Predicted v/c ratio of 1.13 by 2020, 0.07 less than predicted for Alternative 1.</p>	<p>Similar to Alternative 1.</p> <p>Same as Alternative 1.</p> <p>In 2020 Baseline Condition, volumes across all screenlines are projected to increase by 10.1% in the AM peak and 20.4% in the PM peak hour.</p> <p>At Screenline 8, eastbound PM peak hour traffic is projected to be approximately 2.3% greater than the 2020 Baseline Condition (Alt. 4).</p> <p>Predicted v/c ratio of 1.12 by 2020, 0.08 less than predicted for Alternative 1.</p>	<p>Similar to Alternative 1.</p> <p>Same as Alternative 1.</p> <p>Predicted v/c ratio of 1.11 by 2020, 0.09 less than predicted for Alternative 1.</p>

Alternative 1 High End Height and Density	Alternative 2 Concentrated Office Core	Alternative 3 Residential Emphasis	Alternative 4 No Action Alternative
<p>Other screenlines' v/c ratios for the 2020 PM peak hour include:</p> <ul style="list-style-type: none"> -approx. 0.80-0.84 in both directions on Avenues near Seneca St.; -approx. 0.90 for eastbound traffic near 9th Ave in Denny Triangle; -approx. 0.93 for eastbound traffic near 6th Ave in the Commercial Core. <p>In the studied corridors of Denny Way, Stewart St., Olive Way and Howell St., 13 of 38 intersections in the AM peak hour are projected to experience operating conditions at LOS E or F.</p> <p>In the studied corridors, 19 of 38 intersections in the PM peak hour are projected to experience operating conditions at LOS E or worse.</p> <p>Travel Times: For the 2020 PM peak hour, westbound Stewart St. would be approximately 6 minutes slower than the 2020 Baseline Condition. However, travel times would be 3 minutes faster westbound on Denny Way and one minute faster eastbound on Olive Way.</p>	<p>Nearly the same as Alt. 1.</p> <p>Nearly the same as Alt. 1.</p> <p>Nearly the same as Alt. 1.</p> <p>In the studied corridors, 8 of 38 intersections in the AM peak hour are projected to experience operating conditions at LOS E or F.</p> <p>In the studied corridors, 19 of 38 intersections in the PM peak hour are projected to experience operating conditions at LOS E or worse.</p>	<p>Nearly the same as Alt. 1.</p> <p>Nearly the same as Alt. 1.</p> <p>Nearly the same as Alt. 1.</p> <p>In the studied corridors, 8 of 38 intersections in the AM peak hour are projected to experience operating conditions at LOS E or F. This would be 8 more than under existing conditions.</p> <p>In the studied corridors, 22 of 38 intersections in the PM peak hour are projected to experience operating conditions at LOS E or worse.</p>	<p>Nearly the same as Alt. 1.</p> <p>Nearly the same as Alt. 1.</p> <p>Nearly the same as Alt. 1.</p> <p>In the studied corridors, 10 of 38 intersections in the AM peak hour are projected to experience operating conditions at LOS E or F. This would be 8 more than under existing conditions.</p> <p>In the studied corridors, 17 of 38 intersections in the PM peak hour are projected to experience operating conditions at LOS E or worse. This would be 12 more than under existing conditions.</p> <p>For the 2020 Baseline Condition PM peak hour, westbound Stewart Street travel time would be approximately 9 minutes slower than <u>existing conditions</u>. Also, travel times would be nearly 14 minutes slower westbound on Denny Way and 2 minutes slower eastbound on Olive Way.</p>

Alternative 1 High End Height and Density	Alternative 2 Concentrated Office Core	Alternative 3 Residential Emphasis	Alternative 4 No Action Alternative
<p>Transit Service:</p> <p>--North of Seneca Street screenline: Similar to the 2020 Baseline Condition (Alt. 4).</p> <p>--Olive/Stewart corridors: The cumulative amount of travel time spent by transit vehicles in these corridors would increase by 10% and 24% in the AM and PM peak hours, respectively.</p> <p>--Denny Way screenline: Similar (2% less) than the 2020 Baseline Condition (Alt. 4).</p> <p>Transit Layover: Slightly less impact than the 2020 Baseline Condition (Alt. 4). Potentially, 5 existing layover locations displaced.</p>	<p>-- North of Seneca Street screenline: Similar to the 2020 Baseline Condition (Alt. 4).</p> <p>--Olive/Stewart corridors: The cumulative amount of travel time spent by transit vehicles in these corridors would decrease by 1% and 15% in the AM and PM peak hours, respectively.</p> <p>--Denny Way screenline: Transit delay notably greater (21%) than the 2020 Baseline Condition (Alt. 4).</p>	<p>-- North of Seneca Street screenline: Nearly the same level of delay in the AM peak hour as existing conditions. Modest increase in transit delay could occur, on 2nd, 3rd and 4th Avenues.</p> <p>--Olive/Stewart corridors: The cumulative amount of travel time spent by transit vehicles in these corridors would decrease by 4% in the AM peak but increase by 25% in the PM peak hours.</p> <p>--Denny Way screenline: Sum of AM and PM peak hour transit delay approximately the same as Baseline Condition. However, this occurs with a 28% (18-minute) improvement in the AM peak hour and 18% (20-minute) degradation, compared to the 2020 Baseline Condition (Alt. 4).</p> <p>Slightly less impact than the 2020 Baseline Condition (Alt. 4). Potentially, 5 existing layover locations displaced.</p>	<p>-- North of Seneca Street screenline: Nearly the same level of delay in the AM peak hour as existing conditions. Modest increase in transit delay could occur, on 2nd, 3rd and 4th Avenues.</p> <p>--Olive/Stewart corridors: The cumulative transit travel time in these corridors would increase by 40% in the AM peak and 45% in the PM peak hour, compared to existing conditions.</p> <p>--Denny Way screenline: Total minutes of transit delay projected to increase by 34 minutes (115%) in the AM peak hour and 68 minutes (168%) in the PM peak hour, compared to existing conditions.</p> <p>Worst-case transit layover impact: future development by 2020 could displace 10 existing Metro layover locations.</p>

Alternative 1 High End Height and Density	Alternative 2 Concentrated Office Core	Alternative 3 Residential Emphasis	Alternative 4 No Action Alternative
Queuing (lane back-up) problems are predicted at several locations, mostly similar to the 2020 Baseline Condition. However, fewer queuing impacts on Olive Way for the eastbound PM peak, compared to the 2020 Baseline.	PM peak hour impacts would be generally similar to the Baseline Condition, but with fewer queuing impacts on Olive Way than Alternative 1 or the Baseline Condition.	PM peak hour impacts would be generally similar to the Baseline Condition, except conditions would be slightly worse along Stewart Street and somewhat improved along Denny Way, Olive Way and Howell Street.	Queuing problems for some traffic movements would occur at a greater majority of intersections along Stewart, Denny Way and Olive Way, compared to existing conditions.
PARKING Impacts	Nearly the same as Alternative 1.	Slightly less than Alternative 1.	Slightly more than Alternative 1.
Future residential and employment growth would increase overall parking demand, for approximately 19,500 to 23,750 spaces, depending upon the amount of commuters that choose to use transit rather than automobiles. An estimated supply of approximately 17,005 off-street parking spaces would be provided with future development.	An estimated supply of approximately 7,137 existing off-street parking spaces would be displaced by development through 2020, largely in the Denny Triangle and edge of Belltown.	Same as Alternative 1.	Approximately 410 more spaces displaced than Alt. 1.
Competition for on-street parking spaces would likely increase, especially in the areas of concentrated future development.	Same as Alternative 1.	Slightly more probable impact than Alternative 1.	Somewhat greater impact than Alternative 1.
WATER UTILITY Impacts	An additional 5.7 to 6.4 million gallons per day of water demand if full buildout was achieved, a 24-	An additional 5.4 to 6.0 million gallons per day of water demand if full buildout was	An additional 5.4 to 6.0 million gallons per day of water demand if full buildout was

Alternative 1 High End Height and Density	Alternative 2 Concentrated Office Core	Alternative 3 Residential Emphasis	Alternative 4 No Action Alternative
<p>25% increase over buildout of existing zoning. Less than 1 percent of total city water demand.</p> <p>No significant adverse infrastructure capacity impacts identified. Two existing minor deficiencies relating to fire flows can be corrected over time.</p> <p>The typical location of water meters within public rights-of-way makes accessibility and repair costly and difficult.</p>	<p>achieved, a 12-13% increase over buildout of existing zoning. Approximately 0.5 percent of total city water demand.</p> <p>Less potential for adverse impacts than Alternative 1.</p>	<p>achieved, a 6% increase over buildout of existing zoning. Approximately 0.25 percent of total city water demand.</p> <p>Less potential for adverse impacts than Alternative 1.</p>	<p>achieved.</p> <p>No impacts identified.</p>
<p>SEWER & STORMWATER UTILITIES Impacts</p> <p>Future development could occur in a denser manner and generate more total sanitary sewage volume than development under current zoning.</p> <p>By 2020, peak sanitary sewage flows in the Denny Triangle would be approximately 3,750 gallons per minute.</p> <p>Better stormwater controls required with future development would reduce peak stormwater volumes, thus helping to avoid or minimize the risk of overflows during major storm events.</p> <p>No significant adverse sewer/drainage infrastructure or capacity impacts identified.</p>	<p>Similar to Alt. 1, with slightly greater sewage volumes in the Denny Triangle.</p> <p>By 2020, peak sanitary sewage flows in the Denny Triangle would be approximately 3,822 gallons per minute, 1.5% greater than Alt. 1.</p> <p>Similar to Alt. 1.</p> <p>Similar to Alt. 1.</p>	<p>Similar to Alt. 1, with slightly greater sewage volumes in the Denny Triangle.</p> <p>By 2020, peak sanitary sewage flows in the Denny Triangle would be approximately 3,805 gallons per minute, 1.5% greater than Alt. 1.</p> <p>Similar to Alt. 1.</p> <p>Similar to Alt. 1.</p>	<p>Similar to Alt. 1, with slightly lesser sewage volumes in the Denny Triangle.</p> <p>By 2020, peak sanitary sewage flows in the Denny Triangle would be approximately 3,616 gallons per minute, 3.6% less than Alt. 1.</p> <p>Improvements will occur even under the No Action Alternative.</p> <p>No impacts identified.</p>

Alternative 1 High End Height and Density	Alternative 2 Concentrated Office Core	Alternative 3 Residential Emphasis	Alternative 4 No Action Alternative
Worst-case additional sewage volume from full buildup would represent approximately 0.75 percent of treatment plant annual average daily flow.	Worst-case additional sewage volume from full buildup would represent less than 0.5 percent of treatment plant annual average daily flow.	Worst-case additional sewage volume from full buildup would represent less than 0.2 percent of treatment plant annual average daily flow.	No additional impacts from this No Action Alternative.

Significant Unavoidable Adverse Impacts

Population and Employment

No significant unavoidable adverse impacts are identified for any of the alternatives. Over the long term, the alternatives could have differing impacts on the number and composition of Downtown households and Downtown employees, but none of these impacts are identified as significant unavoidable adverse impacts.

Housing

Under all alternatives, large public and private subsidies would be required to meet ambitious targets for housing preservation and production. If these subsidies are not available, some buildings currently providing affordable housing may be lost and other potential housing opportunities may not be created.

In spite of the number of programs currently available to assist households earning less than 30% MAI with housing, some households with employees in new Downtown Seattle office buildings and hotels would have difficulty finding affordable housing to meet their needs in King County. They would need to live in overcrowded conditions, pay more than 30% of their income for rent, or commute from lower-priced housing outside of King County. Those few households not able or willing to make these choices could potentially become homeless.

The TDC program would be eliminated under Alternative 1. The TDC program would no longer be available to projects in some portions of the Denny Triangle DOC2 zone under Alternatives 2 and 3.

Land Use

Under all alternatives, if forecasted development occurs, land uses in the study area would be significantly transformed by the increased density of residential and commercial development. This transformation is interpreted to be consistent with the City's Comprehensive Plan and neighborhood plans for the study area, and is not interpreted to be a significant unavoidable adverse impact.

Similar to existing conditions, some City of Seattle landmarks, some existing housing and some buildings containing human service uses might be demolished. This could occur under any of the alternatives, including the No Action Alternative, and is not interpreted to be a significant unavoidable adverse impact.

Urban Design: Height, Bulk and Scale

Additional height and bulk enabled by proposed zoning changes would add incrementally to the scale of development, resulting in greater differences from the development authorized by existing zoning. This increase in the scale and intensity of development would have the greatest impact in transition areas separating Downtown commercial zones from less intensive residential and mixed-use neighborhoods.

Urban Design: Streetscape and Pedestrian Amenity

Under all the alternatives, future development will reduce solar access to the pedestrian environment and increase the physical enclosure of the street level environment.

Urban Design: Parks and Open Space

Under all the alternatives, the per capita amount of public open space available for use by Downtown residents and employees will diminish.

Views and Aesthetics

Additional height and bulk enabled by proposed zoning changes would add incrementally to the potential future impairment or blockage of views from some areas, predominantly portions of the Capitol Hill (south of Denny Way), Pike/Pine and First Hill neighborhoods.

Climate—Shadows and Wind

None are identified.

Transportation

Without mitigation, future development through the year 2020 would generate additional traffic volumes and increase congestion in portions of Downtown, most notably in the Denny Triangle area. Much of this impact would occur with or without zoning changes. However, if Alternative 1 or Alternative 3 is implemented, congestion in the northeastern Denny Triangle could be approximately 5-10 percent worse than under the other alternatives, including the 2020 baseline condition (Alternative 4 - No Action). Under all the alternatives considered, additional congestion will likely increase overall travel times on Denny Way, Stewart Street and Olive Way, including transit travel time. Implementation of mitigation strategies, at the City's discretion, would likely improve overall transportation conditions, so that a portion of the impacts of traffic congestion could be avoided.

Parking

Additional development over the long term would contribute to increased commuter vehicle trips to and from the Downtown study area, and increased parking demand.

Energy

With implementation of recommended mitigation strategies, significant unavoidable adverse energy impacts are unlikely to occur.

Water Utility

None identified.

Sewer and Stormwater Utilities

None identified.

Mitigation Strategies

A range of possible mitigation strategies for key topics analyzed in this EIS is summarized below. Most of these mitigation strategies are not considered mandatory actions that must be taken if any of the alternatives are chosen. However, the City should consider implementing several strategies to avoid or reduce negative consequences that may occur over time with future development Downtown, as identified in this EIS.

Land Use

Residential Character. Rezones of some areas to promote residential uses could encourage the type of residential character envisioned in some of the Downtown neighborhood plans.

Human Services. A variety of measures are proposed that would encourage the retention of existing buildings currently housing human service agencies and the development of new space for human service agencies, including the development of a human services bonus or TDR program.

Historic Preservation. The City currently has a number of programs in place to help preserve City Landmarks. The City could take a number of measures to direct those resources in ways that would help protect the most threatened structures.

Housing

Funding for Low-Income Housing. The City could undertake a number of different measures to increase the amount of floor area that would be subject to the low-income housing bonus program, including increasing the maximum floor area limit, or applying the program to DMC zones.

Capacity for residential development. A number of changes to Downtown's zoning scheme are identified, to ensure that housing remains a viable component of development Downtown after twenty years.

Housing for larger households. Potential strategies are defined to encourage the development of housing for families with children and other larger households. These include: incentives for units with multiple bedrooms, design review guidelines focused on designing open spaces to meet the needs of families with children, and the development of Downtown facilities for children.

Urban Design

Height, Bulk and Scale. A variety of strategies for addressing bulk issues are identified, including: restrictions on alley vacations; better coordination between height and density limits to ensure desired building forms; density limits and/or additional bulk controls on residential use; special bulk controls in sensitive transition areas and/or areas where more residential character is desired; and provisions conditioning height increases to achieve desired development conditions.

Pedestrian and Streetscape Amenities. Strategies for improving pedestrian circulation and streetscape conditions are identified, especially for areas expected to experience substantial growth.

Parks and Open Space. Potential mitigation strategies include funding key open space improvements by: pooling open space contributions generated through requirements and incentives for individual projects; adding provisions to increase the participation of commercial and residential development in addressing increased demand for public open space; and providing public investments in open space with priorities placed on areas where substantial growth is anticipated.

Views and Aesthetics

Potential mitigation strategies range from:

- exempting the Downtown area and vicinity from consideration of view impacts as currently directed under SEPA; to
- preparing a comprehensive view protection strategy that would identify critical views and the protective measures to be employed.

Transportation and Parking

DEMAND REDUCTION STRATEGIES

Transportation Demand Management (TDM) Strategies. Continue and strengthen the use of TDM strategies. The City and other public agencies should continue to promote (and require as possible) greater implementation of TDM strategies, coordinated through worksites. The following TDM strategies should be promoted:

- Discounted transit passes (e.g., Flex Pass)
- Promotion of other alternative modes (walking, biking)
- Increased telecommuting
- Business use of vans
- Carsharing
- Preferential parking for carpools/vanpools
- Guaranteed ride home
- Enhanced computerized ridematching database and mapping services
- Parking cashout (discontinuing parking subsidies and providing incentives for alternative modes)
- Enhanced real-time transit information via Internet and on-street kiosks.
- FlexCar and residential-based bus pass incentives.

Transportation Management Association (TMA). The City should promote formation of a TMA by Downtown stakeholders to aid in future TDM planning activities.

Area-specific rezones. The City could pursue area-specific rezones to reduce trip generation.

MITIGATION FUNDING STRATEGIES

Transportation mitigation program for Downtown. The City should develop a comprehensive approach to defining transportation mitigation requirements for projects in Downtown or portions of Downtown. A transportation mitigation program could include defining a set of improvements to address significant adverse impacts, and a mechanism by which new development and redevelopment would contribute a fair share toward transportation system improvements. These improvements could address impacts to all mode choices, including roads, transit facilities, bicycle, pedestrian and ride-sharing programs. A transportation mitigation program could provide more certainty and clarity for Downtown property owners and developers, and greater certainty that significant transportation impacts would be remedied over the long term.

MOBILITY STRATEGIES

Define physical improvement options that would enhance the capacity of the transportation network. A comprehensive set of physical improvement options or specific improvement projects could be identified, and related to a transportation mitigation program. This could include previously-identified capital improvement projects, new capital improvements and/or changes (such as lane striping or designation changes) that would make better use of existing rights-of-way. It could also

include projects needing additional right-of-way, such as adding travel lanes or turn lanes to streets, and/or pedestrian/bicycle-oriented improvements, transit facilities, and improvements such as grade-separation of selected intersections. Lane modifications could also include changes to better accommodate transit vehicles and reduce transit delay. The Transportation section of Chapter 3 discusses options for Stewart Street, Howell Street, Olive Way and Denny Way.

Curb lane management. Locate loading zones in alleys or on side streets, and locate access drives (preferably right-in and right-out only) on side streets rather than key arterials. Consider time-of-day restrictions on use of loading zones and pick-up/drop-off zones to avoid peak hour conflicts

Retiming traffic signals to optimize corridor traffic flow. This is a long-term operational strategy best implemented within the context of the entire Downtown street network, and on an ongoing periodic basis as actual changes in traffic volumes and patterns are experienced. More funding would allow more frequent updates to signal timing to better meet changing demands and travel patterns.

Funding for additional staffing of the City's Traffic Management Center. More funding would allow the City to increase staffing and better utilize the capabilities of its traffic management center, including providing quicker signal timing responses to incidents, special events or other fluctuations in day-to-day traffic flows.

PARKING STRATEGIES

Other possible mitigation strategies that could be pursued:

Financial mechanisms. Influence parking demand through financial mechanisms, such as taxes or other user fees.

Reduce parking requirements. Lower the minimum and maximum parking requirements in Downtown, to encourage transit and carpool modes and discourage single-occupant-vehicle commuting by employees.

Area-specific rezones. The City could reduce potential parking demand and trip generation through area-specific rezones.

Energy

To mitigate identified impacts, a combination of mitigation strategies should be selected from the following range of possible strategies, or other strategies not yet identified.

Implement recommendations of City Light's Capacity Plan: Complete City Light's Capacity Plan in 2004 and implement the recommendations that result from that Plan.

Strategically address high-energy-demanding uses: A combined land use and energy strategy could be developed to address impacts of new large loads or staged new large loads in the Downtown.

Incorporate LEED into the Downtown Density Bonus program: Incentives or requirements to use the LEED system's Green Building energy efficiency strategy could promote better energy conservation in future development. In response to the City Council's Resolution 30280, City staff have discussed integration of sustainable building incentives into the building permitting process, and integration of the LEED system into the Downtown density bonus system. The LEED system could be required for participation in the Downtown Density Bonus program as a mitigation strategy to help offset impacts on the electrical system.

A particular threshold of performance in the energy category could be established. Consistent with the City's own internal sustainable building policy, this requirement could be set as a minimum achievement in energy efficiency.

A minimum overall LEED performance could also be set in order to capture other benefits of the program, such as mitigating increased demands on water and wastewater infrastructure, reduction of stormwater impacts, and mitigation of global climate effects. If this was implemented, a development project would go through the certification process administered nationally by the US Green Building Council. A copy of the certification package could be submitted to the City to endorse the required participation in the program. Since LEED certification is not fulfilled until after construction, a strategy would be needed to handle projects that did not meet performance targets when built.

Incorporate LEED into Land Use Code, Design Review, or Building Code: Alternatively, the City could seek to incorporate elements of the LEED system into the Land Use Code, the design review guidelines, and potentially the Building Code. Measures and tools developed as part of LEED would be required or encouraged to be met before a project receives its land use approval. For example, the Downtown design guidelines could be amended to include guidelines on floorplate design, encouraging designs that would allow natural light to intrude to the center of buildings, potentially reducing the amount of lighting required during the day.

More efficient design of buildings' electrical systems: Developers could be required to design their buildings' electrical services so that their average monthly power factor is no less than 0.97. The present financial penalty for having a power factor below 0.97 could be increased to encourage installation of better equipment and/or power factor correction equipment.

Coordination with the building permit process: DPD and City Light will continue their efforts to work with developers during the pre-application process, before issuing building permits.

Water Utility

In response to an existing shortcoming of development regulations, a potential mitigation strategy is:

Implement code changes to require future development to locate water meters in on-site spaces, to improve accessibility and avoid needless utility maintenance work within public rights-of-way. This would also contribute to better metering of water use and greater cost-effectiveness in the City's utility operations.